

REMARKS

Claims 1-12 are rejected under 25 USC 101 because the method of detecting a data structure does not present a concrete tangible result. For example, in claim 1, applicant claims a method of detecting a data structure providing a register for storage of a bit value and then calculating a number (bit) which is basically executing an algorithm operation, therefore, the claim does not include a practical application nor produce a tangible result. Claims 2-12 are rejected for the same reasons as claim 1.

Applicant has amended independent claims 1 and 7 to change the preamble from "detecting a data structure of data" to "processing recovered data". Additionally, a tangible and useful step of "generating merging bits according to the number of trailing zeros to thereby keep an average potential of the bits of data output from the eight-to-fourteen modulator near a DC potential" is added. A similar amendment is made to independent claim 7. Some antecedent basis problems are also corrected in claims 1, 3, 5, 7, 9, and 11 by deleting the unnecessary word "the"; and the unnecessary method step labels a), b), c), etc are deleted from claims 1- 12. No new matter is entered. In particular, refer to paragraph [0005] stating, "According to the Red Book, three merging bits must be inserted into any two data streams of 14 bits for complying with the run-length rule and for keeping the average potential of the NRZ of the 14 bits near the DC potential." Additionally, please refer to paragraph [0015] stating, "Therefore, the numbers of the leading and trailing zeros are generated by detecting the 8 least and most significant bits in the present invention for generating the merging bits." In this way, the invention as claimed now provides a concrete tangible result – ie., generating merging bits for keeping an average potential near a DC potential. Applicant notes that MPEP section 2106 states "A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful." Examples are provided in MPEP section 2106 of a claimed statutory processes including "A digital filtering process for removing noise from a digital signal comprising the steps of calculating a mathematical algorithm to produce a correction signal and subtracting the correction signal from the digital signal to remove the noise." Applicant asserts that the present invention as claimed in currently amended claims 1 and 7 should also be found to be statutory because it produces merging bits, which as explained in the Red Book result in something that is also concrete, tangible and useful - mainly maintaining the potential near a DC level, as is also stated in the claims. Reconsideration of claim 1-12 is

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respectfully requested.

New claims

5 New claims 13-24 are added as device claims claiming an optical storage device corresponding directly to method claims 1-12, respectively. No new matter is entered. In particular, refer to Fig.1 of the present invention as originally filed showing the device structure of an optical storage device according to the present invention and original claims 1-12 stating the various limitations. Consideration of new claims 13-24 is respectfully requested.

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Sincerely yours,



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15 Winston Hsu, Patent Agent No. 41,526
P.O. BOX 506, Merrifield, VA 22116, U.S.A.
Voice Mail: 302-729-1562
Facsimile: 806-498-6673
e-mail : winstonhsu@naipo.com

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